# KARNATAKA TEST HOUSE PVT. LTD.

## MATERIAL TESTING LABORATORY

# 778/44, Gokul 1st Stage, 2nd Phase, 8th Cross, Triveni Road,
Yeshwanthpur, Bangalore - 560 054.
Tel.: 23378383 Telefax : 23375326, E-mail : kthblr@gmail.com Website : www.karnatakatesthouse.com


**Report No. : KTH/C.AGG/2619-4479a/2013-2014** **Date: 26.02.2014**

## TEST REPORT ON AGGREGATE
(Coarse Aggregate)

Name of the Customer* : **The Assistant Executive Engineer,**
Vidyaranyapura Sub Division,
BBMP, Bangalore - 97.

Name of the Project* : Construction of Cement concrete roads at Thindlu village limits in ward No.09.

Name of Contractor* : Mr. C.T.Somashekar, Bangalore.

Source of Sample : Supplied by the Customer.

Sample Received on : 24.02.2014.

Technical Reference : IS : 2386 Part I to VIII- 1963 (Reaffirmed-2002), IS : 383 – 1970.

**Sieve Analysis of Coarse Aggregate - 20mm**

| Sl. No. | Sieve size mm | % Passing | IS : 383-1970 Stipulations | | Remarks |
|---|---|---|---|---|---|
| | | | Single Size | Graded Size | |
| 1 | 40 | 100 | 100 | 100 | Sample confirms to Single Size of IS: Stipulation for 20mm. |
| 2 | 20 | 87.1 | 85 to 100 | 95 to 100 | |
| 3 | 16 | 34.9 | - | - | |
| 4 | 10 | 8.6 | 0 to 20 | 25 to 55 | |
| 5 | 4.75 | 0.8 | 0 to 5 | 0 to 10 | |

| Sl. No. | Test Conducted | Identification mm | Results % | IS : 383 – 1970 Stipulations |
|---|---|---|---|---|
| 1 | Flakiness Index (%) | 20 | 8.48 | Not specified |
| 2 | Elongation Index (%) | 20 | 12.08 | Not specified |
| 3 | Crushing Value (%) | 20 | 23.58 | Shall not be more than 45% for Concrete and 30% for Wearing surfaces, such as runways, roads and pavements. |

* As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

**(SREENIVASA.C)**
**TECHNICAL MANAGER**

**Note :** 1) This report is not to be reproduced except in full without our prior permission in writing.
2) The results listed refer only to the tested samples and applicable parameters.

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**Report No. : KTH/C.AGG/2619-4479/2013-2014** **Date: 26.02.2014**

## TEST REPORT ON AGGREGATE
(Coarse Aggregate)

Name of the Customer* : **The Assistant Executive Engineer,**
Vidyaranyapura Sub Division,
BBMP, Bangalore - 97.

Name of the Project* : Construction of Cement concrete roads at Thindlu village limits in ward No.09.

Name of Contractor* : Mr. C.T.Somashekar, Bangalore.

Source of Sample : Supplied by the Customer.

Sample Received on : 24.02.2014.

Technical Reference : IS : 2386 Part I to VIII– 1963 (Reaffirmed-2002), IS : 383 – 1970.

**Sieve Analysis of Coarse Aggregate - 40mm**

| Sl. No. | Sieve size mm | % Passing | IS : 383-1970 Stipulations | | Remarks |
|---|---|---|---|---|---|
| | | | Single Size | Graded Size | |
| 1 | 63 | 73.4 | 100 | 100 | Sample does not confirms to Single Size of IS: Stipulation for 40mm size Aggregate. |
| 2 | 40 | 4.1 | 85 to 100 | 95 to 100 | |
| 3 | 20 | - | 0 to 20 | 30 to 70 | |
| 4 | 12.5 | - | 0 to 20 | - | |
| 5 | 10 | - | 0 to 5 | 10 to 35 | |
| 6 | 4.75 | - | - | 0 to 5 | |

| Sl. No. | Test Conducted | Identification mm | Results | IS : 383 – 1970 Stipulations |
|---|---|---|---|---|
| 1 | Flakiness Index (%) | 40 | 18.68 | Not specified |
| 2 | Elongation Index (%) | 40 | 34.58 | Not specified |
| 3 | Impact Value (%) | 40 | 24.63 | Shall not be more than 45% for Concrete and 30% for Wearing surfaces, such as runways, roads and pavements. |

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For **KARNATAKA TEST HOUSE PVT. LTD.**

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**TECHNICAL MANAGER**


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**Report No. : KTH/F.AGG/2619-4480/2013-2014** **Date: 26.02.2014**

## TEST REPORT ON AGGREGATE

(Fine Aggregate)

Name of the Customer* : **The Assistant Executive Engineer,**
Vidyaranyapura Sub Division,
BBMP, Bangalore - 97.

Name of the Project* : Construction of Cement concrete roads at Thindlu village limits in ward No.09.

Name of Contractor* : Mr. C.T.Somashekar, Bangalore.

Source of Sample : Supplied by the Customer.

Sample Received on : 24.02.2014.

Technical Reference : IS : 2386 Part I to VIII– 1963 (Reaffirmed-2002), IS : 383 – 1970.

**Sieve Analysis of Fine Aggregate (River Sand)**

| Sl. No. | Sieve size mm | % Passing | IS : 383 – 1970 Specification | | | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | % passing for Zone I | % passing for Zone II | % passing for Zone III | % Passing for Zone IV | |
| 1 | 10 | 100 | 100 | 100 | 100 | 100 | Falls in Zone –III as per table 4 of IS-383 – 1970 Suitable for Construction. |
| 2 | 4.75 | 93.1 | 90 – 100 | 90 – 100 | 90 – 100 | 95 - 100 | |
| 3 | 2.36 | 88.8 | 60 – 95 | 75 – 100 | 85 – 100 | 95 - 100 | |
| 4 | 1.18 | 76.1 | 30 – 70 | 55 – 90 | 75 – 100 | 90 - 100 | |
| 5 | 0.600 | 61.8 | 15 – 34 | 35 – 59 | 60 – 79 | 80 - 100 | |
| 6 | 0.300 | 12.2 | 5 – 20 | 8 – 30 | 12 – 40 | 15 to 50 | |
| 7 | 0.150 | 0.7 | 0 – 10 | 0 – 10 | 0 – 10 | 0 to 15 | |

| Sl. No. | Test Conducted | Results | IS : 383 – 1970 Stipulations |
|---|---|---|---|
| 1. | Materials finer than 75 microns (%) (Deleterious Material) | 1.0 | Shall not be more than 3.0 %. |
| 2. | Fineness Modulus | 2.76 | Min - 2.0<br>Max – 3.5 |

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**Report No. : KTH/ CEMENT/ 2619-4478/2013-2014** **Date: 28.02.2014**

## PHYSICAL TEST REPORT ON CEMENT

Interim 3 & 7 days

Name of the Customer* : **The Assistant Executive Engineer,**
Vidyaranyapura Sub Division,
BBMP, Bangalore - 97.

Name of the Project* : Construction of Cement concrete roads at Thindlu village limits in ward No.09.

Name of Contractor* : Mr. C.T.Somashekar, Bangalore.

Source of Sample : Supplied by the Customer.

Type of Cement* : Ordinary Portland cement (OPC)

Brand of Cement* : Bharthi 53 Grade.

Sample Received on : 24.02.2014.

Period of Test : 25.02.2014 to 28.02.2014.

Technical Reference : IS: 4031(Part I–VI) 1988 (Reaffirmed–2000) & IS: 12269-1987.

| Sl. No. | Test Conducted | Results | IS : 12269-1987 Stipulation | Remarks |
|---|---|---|---|---|
| 1 | Normal consistency | 30.15 % | Not specified | - |
| 2 | Initial setting time | 121 minutes | Shall not be less than 30 minutes | P |
| 3 | Final setting time | 242 minutes | Shall not be more than 600 minutes | P |
| 4 | Compressive strength (Average of three results)<br>a. 72 ± 1h (3 days)<br>b.168 ± 2h (7 days)<br>c. 672 ± 4h (28 days) | <br>27.39 MPa<br>T.T.C<br>T.T.C | <br>Shall not be less than 27.0 MPa<br>Shall not be less than 37.0 MPa<br>Shall not be less than 53.0 MPa | <br>P<br>-<br>- |
| 5 | Fineness (By Blaine's air permeability method) | 319.27 m2/kg | Shall not be less than 225 $m^2$/kg | P |
| 6 | Soundness (Le-chatlier's method) | 1.40 mm | Shall not be more than 10 mm | P |

P: Passes IS requirement F: Fails IS requirement T.T.C: Test To be Conducted.

*As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

**(SREENIVASA.C.)**
**TECHNICAL MANAGER**

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# CONCRETE CUBE TEST REPORT

NAME OF CUSTOMER : C T SOMSHEKAR

NAME OF PROJECT : C T SOMSHEKAR

GRADE :M 20

LOCATION OF CONCRETE : TINLLU BANGALORE

WATER / CEMENT RATIO : 55

IDENTIFICATION MARK : GTM CODE CUBE:1045

NO. OF CUBES TAKEN : 03

## DETAILS OF COMPRESSIVE STRENGTH

| Date Cast | Date Tested | Age at Test (Days) | Weight of Cube (Kg) | Load in (KN) | Ultimate Strength ($N/mm^2$) | Average Strength ($N/mm^2$) |
|---|---|---|---|---|---|---|
| 18-Jul-14 | 25-Jul-14 | 7 | 8.300 | 365 | 16.22 | 17.63 |
| | | | 8.250 | 405 | 18.00 | |
| | | | 8.300 | 420 | 18.67 | |

**NOTE:**

* Concrete Cubes Are Cured in Water & Tested as Per IS:516:2004.
* Size of The Specimen 150 mm x 150 mm x 150 mm
* 1 $N/mm^2$ = $10Kg/cm^2$
* This Report is Not Valid Unless Signed by our Authorized Personnel & Bears Our Official Company Stamp

**REMARKS:**

Acknowledgement:

For GUNITE TECHNOMIX

Q/C-Technical

GUNITE TECHNOMIX QA/QC OFFICIAL STAMP

29/7/14

AE-09